

DERWENT-ACC-NO: 2001-519673
DERWENT-WEEK: 200157
COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Decreasing removing rate of polishing for low dielectric constant material comprises directly integrating low dielectric constant material into copper damascene process

INVENTOR: BAO, T; JANG, S

PATENT-ASSIGNEE: TAIWAN SEMICONDUCTOR MFG CO LTD[TASEN]

PRIORITY-DATA: 1999TW-0110309 (June 21, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
TW 420844 A	February 1, 2001	N/A	020	H01L 021/304

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
TW 420844A	N/A	1999TW-0110309	June 21, 1999

INT-CL (IPC): H01L021/304

ABSTRACTED-PUB-NO: TW 420844A

BASIC-ABSTRACT: NOVELTY - Decreasing the removing rate of polishing for low

dielectric constant material comprises depositing a low dielectric constant material on a semiconductor substrate to form a dielectric layer, and performing an NH3 plasma, N2 plasma or Ar plasma process to increase the density degree of the dielectric layer, thereby decreasing the removing rate of polishing.

ADVANTAGE - The selectivity of chemical mechanical polishing process is increased, so as to assist the integration of the low dielectric constant material and copper damascene process.

CHOSEN-DRAWING: Dwg.1/2

TITLE-TERMS:

BEST AVAILABLE COPY

EV 182656495

DECREASE REMOVE RATE POLISH LOW DIELECTRIC CONSTANT
MATERIAL COMPRISE INTEGRATE
LOW DIELECTRIC CONSTANT MATERIAL COPPER PROCESS

DERWENT-CLASS: L03 U11

CPI-CODES: L04-C26;

EPI-CODES: U11-C06A1A;

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2001-155438

Non-CPI Secondary Accession Numbers: N2001-384702

BEST AVAILABLE COPY